Province of
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Ministry of
Health

DIVISION OF TUBERCULOSIS CONTROL

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F O R E W O R D

This report presents statistical information relating to tuberculosis as derived from the activities of the Division of Tuberculosis Control during the calendar year, 1982. The report covers the following aspects: institutional treatment of tuberculous patients, treatment of active tuberculous disease as well as chemoprophylaxis, an analysis of new active cases, of contacts and tuberculosis-related mortality; case-finding programmes are reviewed. Information respecting North American Indians refers only to Registered (Status) Indians, who constitute a distinct administrative group for which health care is provided, for the most part, by the Federal Government.

E.A. Allen, M.B., F.R.C.P. (C)
Director

DIVISION OF TUBERCULOSIS CONTROL

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DIRECTOR'S REPORT

DIVISION OF TUBERCULOSIS CONTROL

E.A. Allen, M.B., F.R.C.P.(C)

The Division of Vital Statistics provides a valuable statistical service to the Division of Tuberculosis Control. Summaries of all medical records including notifications, follow-up reports, active case registry and treatment records are processed by the computer system monthly, by the Division of Vital Statistics. In addition, the Division of Vital Statistics arranges to provide annual listings of all the known cases of tuberculosis and non-tuberculous cases to the the Registry, as well as a number of special listings separately for tuberculous and non-tuberculous cases. The Annual Statistical Report is prepared for the Director by a Research Officer of the Division of Vital Statistics.

The five major sections of this report encompass the following subjects:

INSTITUTIONS, DIAGNOSTIC AND SURVEY CLINICS, NEW ACTIVE CASES, CONTACT TRACING AND MORTALITY.

1 9 8 2

INSTITUTIONS

(Tables 1 - 8)

The total number of admissions during 1982 was 134, a slight decrease from 1981 but a higher number than in 1980. Of this number, 129 had active tuberculosis, 3 having non-tuberculous disease and 2 having mycobacterial disease other than that caused by tubercle bacilli. Of the 129 tuberculous cases, 20 were re-admissions (15 percent). Since there were 418 active cases of tuberculosis diagnosed during 1982, the ratio of those admitted to hospital was 30 percent. Of the 129 cases, 121 had primarily pulmonary tuberculosis whereas 8 had non-pulmonary disease. The ratio of male to female was 109 to 20, i.e. 81 percent of those admitted were males, an approximate ratio of 4 males to 1 female. A disproportionate number of North American Indians, Chinese and East Indians were admitted, the proportions being 23 percent, 23 percent and 9 percent respectively. Above the age of 20 years, each decade had approximately the same number of admissions, the highest number belonging to the decade 20-29 years.

An analysis of the discharges from sanatorium in 1982, which totalled 144 (including all diagnostic categories) shows that 100 or 69 percent were discharged before the end of 3 months. All but 4 of the remaining 44 patients were discharged before 6 months. 39 of the 44 patients had advanced pulmonary or miliary tuberculosis. In Table 6, dealing with the various types of discharge from hospital, the two categories "against medical advice" and "disciplinary" should be understood to represent an underestimate of those who leave earlier than is considered wise by the responsible physician, based on a variety of practical, legitimate concerns. In an effort to maintain rapport with such patients, a physician will often reluctantly accede to an earlier discharge "on medical advice".

Eighty-eight percent of the pulmonary cases admitted to hospital were positive on smear, underlining the fact that a major concern was the temporary isolation of patients during the early phases of treatment to reduce the risk of transmission of disease to their close contacts.

CHEMOPROPHYLAXIS

(Table 9)

On December 31st, 1982, 740 residents of British Columbia were on preventive drug treatment with Isoniazid for a variety of indications related to their increased risk for the development of active tuberculosis. This represents an 11 percent drop from the 832 who were on similar therapy as of December 31st, 1981. Of the 740 persons, 426,or 58 percent,were white. The next largest group were Chinese at 101,or 14 percent,followed by the Vietnamese at 90,or 12 percent,and East Indian at 57,or 8 percent. The Registered (Status) North American Indians contributed 60,or 8 percent; only 6 additional (Non-Status)Indians received chemoprophylaxis.

ANTI-TUBERCULOSIS TREATMENT

(Table 10)

At the end of 1982, 423 persons were on antimicrobial drug therapy for tuberculosis, a similar number to the same period in 1981 (422). There was insufficient information on one patient, leaving 422 patients to be divided according to age, sex, and health district.

246 or 58 percent were males and 176 or 41 percent were females. In the under fifteen age group, there were 29 persons,or 7 percent,of the total. In the group fifteen to sixty-four years, there were 295 patients,or 70 percent of the total. The group over 65 contained 98 persons,or 23 percent of the total.

43 percent (182) persons of those under treatment came from the City of Vancouver.

DIAGNOSTIC AND SURVEY CLINICS

(Tables 11 - 15)

In Table 11, a summary of the diagnostic services provided by the Division of Tuberculosis Control is given. The number of patient visits to the clinics of the Division was 44,169 during 1982. There follows a short table illustrating the trend for patient visits over the last decade. It can be seen that there has been only a very small decline in the number of patient visits over this period; in fact, during the height of the Southeast Asian Refugee Programme in 1980, the number of patient visits closely approached that for 1972.

Patient Visits to Clinics of T.B. Control, B.C.		
1972	-	53,256
1976	-	35,970
1980	-	51,755
1981	-	45,094
1982	-	44,169

In Table 12, the yield, in terms of various abnormal chest conditions, for the various survey chest x-ray services is detailed. The yield for new tuberculosis cases of various kinds - active, inactive and presumed tuberculosis (apical scarring), was 68 persons or a yield for this programme of 446 per 100,000. The number of persons with active tuberculosis was 11 for a rate of 72 per 100,000. The latter is approximately four times the provincial rate. Over the last year or two, the recommendations for tuberculosis screening amongst selected employee groups has been revised, with the emphasis being placed on the tuberculin test. This should lead to a decline in the number of survey x-rays over the next year or two.

Tables 13 and 14 illustrate the trend for x-ray examinations over a number of years. Table 13 reflects the number of patients who were x-rayed during 1982 either by the x-ray units within the clinics of the Division or whose x-rays were referred into one of the clinics of

the Division for consultation or whose x-rays were requested by the Division to complete the diagnostic picture. The abrupt drop from 1980 to 1981 and subsequently reflects the discontinuation of the many miniature x-ray units operated by the Division and various health units in May 1980. This same observation is applicable to Table 14 which details the total number of x-rays read by the physicians of the Division. The total number of x-rays read by the Division in 1982 was 43,583.

B.C.G. VACCINATION

(Table 15)

During 1982, 733 persons received B.C.G. vaccination, a small drop from the 757 persons who received B.C.G. in 1981. Of this number, 571 or 78 percent were Registered Indians, the great majority of whom represented newborn children. The practice of newborn B.C.G. vaccination is an integral part of the overall T.B. programme of Medical Services, Pacific Region, and the compliance with this programme is fairly good, 342 or 55 percent of the 622 Registered Native Indians on reserve who were born during 1982 having received the vaccine.

ACTIVE CASES

(Tables 16-31)

For purposes of this report, "active cases", when unqualified, will refer to persons with active tuberculosis who were diagnosed during 1982; it will exclude those persons diagnosed active in previous years but who have remained continuously active into the current year. The term "new active" will refer to those persons diagnosed as having active tuberculosis during the current year but who were not known or suspected to have had an active episode of tuberculosis prior to the current year. The term "reactivated" includes two groups of persons: (i) those with a documented previous episode of active tuberculosis (Reactivation Type I) and (ii) those with evidence of healed disease of such a typical nature that it leads to a presumption of inactive tuberculosis (Reactivation Type II). Evidence of the latter usually consists of a chest x-ray showing apical fibrosis or scarring in a person with a positive tuberculin test.

The numbers belonging in these various categories are summarized in Summary - Table A.

SUMMARY - TABLE A

	Number	Percent
Cases diagnosed active in 1982:		
New active: not known to be previously active	347	83%
Reactivated:	71	17%
Previously documented active T.B.	(55)	(13%)
Previously presumed T.B. inactive	(16)	(4%)
TOTAL	418	100%
Provincial Rate: 15.2 per 100,000		
Sex distribution:		
Male	231	55%
Female	187	45%
	418	100%

It will be seen that 418 persons were diagnosed as having active tuberculosis during 1982, providing a provincial incidence rate of 15.2 per 100,000, the highest since 1976 (with the exception of 1978).

The sex distribution, predominantly male, is also summarised in Summary-Table A.

The incidence of tuberculosis varies with age and the current distribution, emphasizing the fairly sharp increase over the age of 55 in both males and females but particularly in the former, is consistent with previous years. The maximum rate is achieved in the age group 75 years and older which for males and females combined is 36.7 per 100,000. (Table 18).

ORIGINAL INVESTIGATIONS

(Table 18)

The agency providing the initial investigation (usually an x-ray) leading to the diagnosis of active tuberculosis was analysed. The results proved remarkably similar to 1981 as follows: In 24 percent of cases, the initial diagnostic investigation was undertaken by one of the units of the Division. In 2 percent of cases, this initial investigation was undertaken by one of the units of the Indian Health Services. Not surprisingly, private radiologists and the x-ray departments of general hospitals along with other forms of investigation undertaken in general hospitals either as in-patients or out-patients provided the initial diagnostic investigation of the majority of persons diagnosed as having active tuberculosis during the current year (282 or 67 percent). The role of diagnostic resources other than x-ray, for example biopsy or bacteriology of pus or secretions, as the initial investigation, is illustrated by the fact that 29 percent of the 282 patients were diagnosed by this means. A small but important group is represented by the 3 percent of patients who were diagnosed at the time of death, most of whom were not correctly diagnosed during life.

CATEGORIES OF DIAGNOSIS - ACTIVE CASES

(Tables 19A,19B, 20A,20B, 21, 22)

The main anatomical site of the active tuberculosis and the proportion of cases in which there was bacteriological confirmation of tuberculosis and the analysis of the bacteriological status in relation to extent and type of pulmonary disease, prior status for tuberculosis, and Native Indian status (confined to those who are Registered and living on reserve, i.e. those who are primarily under the jurisdiction of the Indian Health Services) are summarised in Table "B".

SUMMARY - TABLE 3

Bacteriological Confirmation of Active T.B. (1982) by Anatomical Site:		Pos. smear	Pos. Cult. only	Cult.and/or Smear	NUMBER	PERCENT
PULMONARY (incl.pleurisy)	Bacillary	144	88	232	232	72%
	Non-bacillary *				92*	28%
	TOTAL				324	100%
NON-PULMONARY	Bacillary	(not available)			51	54%
	Non-Bacillary				43	46%
	TOTAL				94	100%
No. & Percent Bacillary					283	68%
No. & Percent Non-bacillary					135	32%
TOTAL: Active cases					418	100%

by Extent of Pulmonary Disease	TOTALS	BACILLARY NUMBER	BACILLARY PERCENT
Primary	37	4	11%
Minimal	131	96	73%
Moderately Advanced	71	67	92%
Far Advanced	47	45	96%
Pleurisy	21	8	38%
Tuberculoma	2	0	0%
Miliary	15	12	80%
	324	232	72%
by Prior Status for T.B.			
New Active	347	228	66%
Reactivated (incl.both "prev.act." & "presumed T.B.")	71	55	77%
	418	283	68%
by Native Indian Status (Registered, on reserve)	43	36	84%

* includes 31 cases of pulmonary tuberculosis where bacillary status not known. (See Table 24, p.25).

There were 324 pulmonary and 94 non-pulmonary cases. Of the pulmonary cases, 72 percent were bacteriologically confirmed. Of the pulmonary cases, 44 percent yielded a positive direct smear for tubercle bacilli. In recent years, there has been a fairly consistent smear-positive rate of approximately 50 percent, underlining the considerable value of this test as a diagnostic tool for detecting active tuberculosis and, for practical purposes, for detecting all those who are potentially infectious and require isolation precautions. For this test to be of value for diagnostic and epidemiological purposes, it has to be done carefully and consistently and the fact that virtually all of the mycobacterial work is centralised in the Provincial Laboratory where a high level of competence and technical continuity is provided allows great confidence to be placed in the results.

Sixty-eight percent of all cases were bacteriologically confirmed in 1982. When the extent and type of pulmonary disease is analysed, there is a clear correlation between extent of disease and the likelihood of positive bacteriology with 96 percent of far advanced cases being confirmed bacteriologically. A rather low rate of bacteriological confirmation was obtained in the case of pleurisy; this may mean that the diagnosis of tuberculous pleurisy should be pursued more vigorously or it may mean that a presumption of tuberculosis is entertained too lightly. Positive bacteriology was obtained in a high percentage (80 percent) of miliary cases.

Whether a person was presenting with new active or reactivated disease made little difference to the likelihood of positive bacteriology, which was 77 percent for reactivated disease. Native Indians presented a higher rate of positive bacteriology than that applying to the total number of active cases.

Tables 19 A and B, 21 and 22, 24, 26A and B and 27, all give further details of the bacillary status of various categories of patient or diagnosis.

HEALTH DISTRICT OF RESIDENCE - ACTIVE TUBERCULOSIS

(Table 23)

Highest rates were obtained in Metro Vancouver (29 per 100,000 or nearly double the provincial rate. Cariboo and Skeena were the only other districts above the provincial rate at 20.4 and 15.3 respectively.

ACTIVE CASE YIELD OF ROUTINE FOLLOW-UP CLINICS

(Table 25)

This table illustrates that 27 percent of the active cases diagnosed in 1982 derived from the follow-up of those with inactive tuberculosis and those with various abnormalities, some suspected to be tuberculous in origin.

ACTIVE TUBERCULOSIS BY RACIAL ORIGIN

(Tables 26A, 26B)

Although not contributing unduly large numbers of cases, East Indians, Chinese and Registered Indians demonstrated relatively high rates. In Table 26(B), the rates for Canadian born and non-Canadian born are compared and these illustrate the significantly higher rates in those born outside of Canada, a rate approximately three times that pertaining to the Canadian-born population. There has been concern that the non-Canadian born population not reflect a falsely high rate as a result of the contribution made by visitors who are not Canadian citizens nor landed immigrants. Only 10 of the 220 non-Canadian born group were visitors or on Minister's Permit.

NON-PULMONARY ACTIVE TUBERCULOSIS

(Tables 19A,19B, 20A,20B, 21,22)

The total number of non-pulmonary cases was 94 with 59 percent of them presenting primarily as tuberculous lymphadenopathy (55 cases). The next most common group was that having tuberculosis of the genito-urinary system (15 cases or 16 percent of all non-pulmonary cases). Of some concern is the fact that only 51 percent of the cases of tuberculous lymphadenopathy were bacteriologically confirmed. This often results from a lack of awareness of the possibility of tuberculosis as the cause or from the mishandling of biopsy specimens. As mycobacteria other than tubercle bacilli

assume a relatively greater role as a cause of mycobacterial lymphadenopathy, particularly in Canadian-born children, the necessity to identify the organism becomes increasingly important. It is of interest that the cases of lymphadenopathy were more or less evenly spread across all age groups in both sexes with the highest number being in the 25-34 age group.

CONTACTS OF SOURCE CASES WITH ACTIVE TUBERCULOSIS

(Tables 32 - 35)

SUMMARY - TABLE C

SOURCE (Diagnosed in 1982)	HOUSEHOLD CONTACTS (Diagnosed in 1982)				
		DISEASE		INFECTION	
PULMONARY TUBERCULOSIS, ACTIVE - BACILLARY STATUS	NUMBER of CONTACTS (n = 431)	ALL ACTIVE CASES		POSITIVE TBC. REACTION (≥ 9 mm.)	
		No.	Percent	No./No.tested	Percent
Positive smear and culture	263	26	9.9	110/228	48.2%
Positive culture only	116	2	1.7	34/101	33.7%
Negative smear and culture	34	1	2.9	6/28	21.4%
TOTALS	413*	29	7.0*	150/357**	42%

* Note: Excludes 18 contacts of active pulmonary source cases in which the bacteriological status was not stated.

** Note: 357 were tuberculin tested out of total of 413 household contacts, i.e. 14% were not given tuberculin tests.

In 1982, there were 3,767 contacts listed for the 418 active tuberculous cases diagnosed in 1982. 2,105 contacts were identified with the pulmonary source cases and 1,662 with the non-pulmonary source cases. As will be seen by the tables detailing the contact investigation, the relationships between the following aspects were studied - pulmonary source case, proximity of contact (whether household or non-household), age of contact, initial tuberculin status of contact, bacteriological status of the source case (whether positive on smear and culture, positive on culture only or negative on both smear and culture). Among the contacts of the pulmonary cases,

40* cases of active tuberculosis were found giving a rate of 1900/100,000 (or 1.9 percent). This is compared with the overall provincial rate of 15.2 per 100,000 for the same year. Admittedly, 24 of the 40 persons with active disease among the contacts had primary tuberculosis (60 percent); yet, the 16 remaining cases would still provide a rate of 800 per 100,000 or many multiples of the background rate. Among the 1662 contacts of non-pulmonary source cases, no active tuberculosis was found, perhaps making the same point as is made in Summary - Table C - and in the other tables that the bacillary status of the source case is of considerable importance.

Summary - Table C - illustrates clearly the importance of the bacillary status of the active pulmonary source case to household contacts. The relationship is particularly evident for active tuberculosis among the contacts but it is also evident for positive tuberculin reactors. The latter relationship is less sharply defined since many of the adult contacts will have had a positive tuberculin reaction for a long time preceding the current exposure. The occurrence of disease among household contacts of pulmonary source cases with sputum negative on smear and culture is evidence either of transient infectiousness which has been missed by our normal contact procedures or perhaps more likely reflects the social environment which subjects tuberculous patients and their close contacts to a higher common risk of becoming infected.

In Table 33, the high rate of active disease among contacts under the age of 20 is illustrated (4.4 percent) where exposure is to active pulmonary tuberculosis within the household; most of the cases derive from the age group 0-14 years. Again, in Table 34, the clear differences between household and non-household exposure is illustrated for source cases with similar bacillary status. In Table 35, the likelihood of becoming infected (and producing a positive tuberculin reaction) is related to age when this relationship is studied against the bacillary status of the source case. Above the age of 30, a differential was not seen between exposure to a source who has positive smear and culture versus a source positive on culture only. In these older age groups, the presumption is that a high percentage will have been remotely infected through casual exposure.

* 10% of the total number of active tuberculosis cases diagnosed in 1982.

TUBERCULOSIS MORTALITY

(Tables 37 - 41)

37 persons died with active tuberculosis during 1982. In the case of 6 of these, although they harboured active tuberculosis, this was not considered contributory to death. Although the number of persons dying from active tuberculosis is relatively small, it is disturbing that a relatively high percentage of these is still only diagnosed after death. Since tuberculosis is an eminently treatable disease, one could argue that all deaths from tuberculosis are potentially avoidable.

ACTIVE TUBERCULOSIS AMONG REGISTERED INDIANS

(Tables 42 - 44)

43 Registered Indians developed active tuberculosis during 1982. The age and sex distribution, the type of disease, the bacillary status and the health districts from which these cases came are detailed in these tables.

SECTION I - INSTITUTIONS

(Tables 1 - 8)

Table 1. TOTAL ADMISSIONS[1] BY AGE, AND PERCENTAGE OF TOTAL ADMISSIONS IN EACH GROUP, British Columbia, 1978 - 1982

GROUP	1978		1979		1980		1981		1982	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0 - 9 Years. . . .	2	1.7	2	2.0	-	-	2	1.4	4	3.0
10 - 19 Years . . .	2	1.7	2	2.0	2	1.7	8	5.6	10	7.5
20 - 29 Years . . .	14	12.1	17	16.8	14	11.8	17	11.9	25	18.6
30 - 39 Years . . .	14	12.1	11	10.9	21	17.6	21	14.7	15	11.1
40 - 49 Years . . .	20	17.2	19	18.8	18	15.2	19	13.3	21	15.6
50 - 59 Years . . .	20	17.2	19	18.8	21	17.6	27	18.8	21	15.6
60 - 69 Years . . .	16	13.8	14	13.9	23	19.3	23	16.1	19	14.2
70 - 79 Years . . .	28	24.2	17	16.8	20	16.8	26	18.2	19	14.2
TOTAL	116	100.0	101	100.0	119	100.0	143	100.0	134	100.0

[1] Includes re-admissions.

The above figures include admissions to Sunny Hill Hospital for Children: - 2 in 1978
2 in 1979
0 in 1980
2 in 1981
4 in 1982

Table 2.

TOTAL ADMISSIONS[1] TO TUBERCULOSIS INSTITUTIONS BY DIAGNOSIS, AGE-GROUP, AND SEX, British Columbia, 1982

AGE-GROUP		PULMONARY - ACTIVE							Other Mycobacterium	Non-Pulmonary T.B.[3]	Non-tuberculous	TOTALS by Sex	GRAND TOTAL
		Primary	Minimal	Moderately Advanced	Far Advanced	Miliary	Pleurisy	Other respiratory[2]					
0 - 9 Years . . .	M	3	-	-	-	-	-	-	-	-	-	3	4
	F	1	-	-	-	-	-	-	-	-	-	1	
10 - 19 Years . .	M	2	1	-	2	-	1	1	-	-	-	7	10
	F	-	-	1	-	-	-	1	-	1	-	3	
20 - 29 Years . .	M	-	1	5	4	1	-	-	-	4	1	16	25
	F	-	4	5	-	-	-	-	-	-	-	9	
30 - 39 Years . .	M	-	4	3	3	-	1	-	-	-	-	11	15
	F	-	-	4	-	-	-	-	-	-	-	4	
40 - 49 Years . .	M	-	2	5	5	1	3	-	-	-	-	16	21
	F	-	1	3	-	-	1	-	-	-	-	5	
50 - 59 Years . .	M	-	3	7	7	-	-	-	1	-	-	18	21
	F	-	-	1	-	-	-	-	-	2	-	3	
60 - 69 Years . .	M	-	1	6	5	-	-	1	-	-	-	13	19
	F	-	-	2	1	-	-	1	1	1	-	6	
70 Years & Over .	M	-	4	2	6	-	-	-	-	-	1	13	19
	F	-	2	3	-	-	-	-	-	-	1	6	
TOTAL	M	5	16	28	32	2	5	2	1	4	2	97	134
	F	1	7	19	1	-	1	2	1	4	1	37	
GRAND TOTAL . . .		6	23	47	33	2	6	4	2	8	3	134	134

[1] Includes 21 re-admissions. See note on Table 1. re Sunnyhill Hospital.

[2] Includes 1 care Pulmonary - extent not specified.

3 Includes 1 intestine, 3 lymphatic, 3 meninges, and 1 bone & joint.

Table 3. TOTAL ADMISSIONS BY DIAGNOSIS, SEX AND TYPE OF ADMISSION, British Columbia, 1982

DIAGNOSIS	FIRST ADMISSIONS		RE-ADMISSIONS		TOTAL		
	Male	Female	Male	Female	Male	Female	Total
PULMONARY ACTIVE							
Primary	5	1	-	-	5	1	6
Minimal	14	6	2	1	16	7	23
Moderately Advanced. .	22	16	6	3	28	19	47
Far Advanced	28	1	4	-	32	1	33
Miliary	2	-	-	-	2	-	2
Pleurisy	3	1	2	-	5	1	6
Other Respiratory. . .	2	2	-	-	2	2	4
OTHER MYCOBACTERIUM . .	-	1	1	-	1	1	2
NON-PULMONARY ACTIVE							
Intestines	-	1	-	-	-	1	1
Meninges	1	-	2	-	3	-	3
Lymphatic Glands . . .	1	2	-	-	1	2	3
Bone & Joint	-	1	-	-	-	1	1
NON-TUBERCULOSIS. . . .	2	1	-	-	2	1	3
TOTAL	80	33	17	4	97	37	134

Table 4. TOTAL ADMISSIONS[1] BY DIAGNOSIS, RACE AND SEX, British Columbia, 1982

DIAGNOSIS	WHITE & OTHER[2]		REGISTERED INDIANS		NON-STATUS INDIANS		CHINESE		EAST INDIANS		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F
PULMONARY ACTIVE												
Primary	1	-	-	-	3	1	1	-	-	-	5	1
Minimal	8	2	-	2	-	2	8	1	-	-	16	7
Moderately Advanced	15	6	5	2	1	4	4	4	3	3	28	19
Far Advanced	22	-	3	-	1	-	4	-	2	1	32	1
Miliary	-	-	1	-	-	-	1	-	-	-	2	-
Pleurisy	1	-	3	-	-	-	1	-	-	1	5	1
Other Respiratory[3]	-	1	-	1	-	-	1	-	1	-	2	2
OTHER MYCOBACTERIUM	1	1	-	-	-	-	-	-	-	-	1	1
NON-PULMONARY ACTIVE												
Intestines	-	-	-	-	-	-	-	-	-	1	-	1
Meninges	-	-	-	-	-	-	3	-	-	-	3	-
Lymphatic Glands	-	1	-	-	1	-	-	1	-	-	1	2
Bone & Joint	-	-	-	-	-	-	-	1	-	-	-	1
NON-TUBERCULOSIS	1	1	-	-	1	-	-	-	-	-	2	1
TOTAL	49	12	12	5	7	7	23	7	6	6	97	37
											134	

[1] Includes 21 re-admissions

[2] White & Other includes all races not identified in the separate headings

[3] Includes 1 case Pulmonary - extent not specified

Table 5. DISCHARGES FROM TUBERCULOSIS INSTITUTIONS[1], BY DIAGNOSIS UPON DISCHARGE, SEX, AND LENGTH OF STAY, British Columbia, 1982

DIAGNOSIS	Mos. / Days	LENGTH OF STAY IN COMPLETED MONTHS/DAYS: Under 1 mo. 0-29	1 - 2 30 - 89	3 - 4 90 - 149	5 - 6 150 - 209	7 - 11 210-364	TOTAL
PULMONARY: ACTIVE							
Primary	M	-	4	1	-	-	5
	F	-	1	-	-	-	1
Minimal	M	9	8	1	-	-	18
	F	5	1	1	-	-	7
Moderately Advanced	M	9	7	12	6	3	37
	F	8	9	4	-	-	21
Far Advanced	M	6	11	7	3	1	28
	F	-	1	-	1	-	2
Miliary	M	-	1	2	-	-	3
	F	-	-	-	-	-	-
Pleurisy	M	3	2	1	-	-	6
	F	1	-	-	-	-	1
NON-RESPIRATORY	M	2	1	-	-	-	3
	F	3	-	-	-	-	3
RESPIRATORY: INACTIVE	M	2	-	-	-	-	2
	F	1	1	-	-	-	2
NON-TUBERCULOUS	M	3	-	-	-	-	3
	F	1	-	1	-	-	2
TOTAL	M	34	34	24	9	4	105
	F	19	13	6	1	-	39
GRAND TOTAL		53	47	30	10	4	144
PERCENT		36.0	33.0	21.0	7.0	3.0	100
DISCHARGE DEAD		2	1	2	3	-	8

[1] Includes discharges from Sunnyhill Hospital: 2 in 1978
2 in 1979
0 in 1980
2 in 1981
4 in 1982

Table 6. DISCHARGES FROM TUBERCULOSIS INSTITUTION BY TYPE OF DISCHARGE, SEX, AND LENGTH OF STAY, British Columbia, 1982

TYPE OF DISCHARGE		LENGTH OF STAY IN COMPLETED MONTHS					TOTAL BY SEX	GRAND TOTAL
	(Days)	Under 1 0 - 29	1 - 2 30-89	3 - 4 90-149	5 - 6 150-209	7 - 11 210-364		
On Medical Advice . . .	M	30	31	21	5	3	90	122
	F	15	11	6	-	-	32	
Against Medical Advice.	M	2	1	-	-	1	4	9
	F	3	1	-	1	-	5	
Disciplinary	M	1	2	1	1	-	5	5
	F	-	-	-	-	-	-	
Death.	M	1	-	2	3	-	6	8
	F	1	1	-	-	-	2	
TOTAL	M	34	34	24	9	4	105	144
	F	19	13	6	1	-	39	
GRAND TOTAL		53	47	30	10	4	144	144

Table 7. PLACE OF TREATMENT OF ACTIVE TUBERCULOSIS CASES BY PRINCIPAL DIAGNOSIS, British Columbia, 1982

DIAGNOSIS	DOMICILIARY		HOSPITAL[1]		OTHER[2]		TOTAL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Primary	31	83.8	6	16.2	-	-	37	100.0
Minimal	115	87.8	13	9.9	3	2.3	131	100.0
Moderately Advanced .	34	48.0	36	50.7	1	1.3	71	100.0
Far Advanced.	11	22.9	30	64.6	6	12.5	47	100.0
Miliary	7	46.7	3	20.0	5	33.3	15	100.0
Tuberculoma	2	100.0	-	-	-	-	2	100.0
Pleurisy.	16	76.2	5	23.8	-	-	21	100.0
Non-Pulmonary	85	90.5	7	7.5	2	2.0	94	100.0
TOTAL.	301	72.0	100*	24.0	17	4.0	418	100.0

* excludes re-admissions

[1]Special T.B. ward under administration of Pearson Hospital only.
[2]Notified on death.

Table 8. PLACE OF TREATMENT OF ACTIVE TUBERCULOSIS CASES ACCORDING TO PRINCIPAL BACTERIOLOGICAL FINDINGS, British Columbia, 1982

BACTERIOLOGICAL FINDINGS	DOMICILIARY		HOSPITAL[1]		OTHER[2]		TOTAL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
POSITIVE - Smear & Culture								
Pulmonary[3]	58	40.3	77	53.5	9	6.2	144	100.0
Non-Pulmonary . . .	10	83.4	1	8.3	1	8.3	12	100.0
POSITIVE - Culture Only								
Pulmonary	78	88.6	8	9.1	2	2.3	88	100.0
Non-Pulmonary . . .	33	84.6	5	12.8	1	2.6	39	100.0
NEGATIVE								
Pulmonary	53	87.0	8	13.0	-	-	61	100.0
Non-Pulmonary . . .	17	100.0	-	-	-	-	17	100.0
NOT EXAMINED								
Pulmonary	27	86.2	-	-	4	13.8	31	100.0
Non-Pulmonary . . .	25	96.4	1	3.6	-	-	26	100.0
TOTAL	301	72.0	100.0*	24.0	17	4.0	418	100.0

* excludes re-admissions.

[1] Special T.B. ward under administration of Pearson Hospital only.

[2] Notified on death. This group includes persons from whom sputum or gastric lavage was not obtainable.

[3] Includes pleurisy.

SECTION II - TREATMENT

(Tables 9 - 10)

Table 9. BRITISH COLUMBIA RESIDENTS ON CHEMOPROPHYLAXIS AS OF DECEMBER 31, 1982

REASON FOR CHEMOPROPHYLAXIS	NUMBER
1. Positive tuberculin reactor with extra risk factor.	
A. Contact	336
B. Convertor	55
C. Steroids	28
D. Diabetes, sarcoidosis, silicosis, etc.	33
2. Positive tuberculin reactor without extra risk factor.	184
3. Chest x-ray evidence of inactive tuberculosis[1]	78
4. Miscellaneous:	
A. Localised pulmonary fibrosis	5
B. Insufficient data to categorise	21
TOTAL	740

[1] Most have positive tuberculin reaction; some have documented previous active tuberculosis.

Table 10.

PERSONS ON OUT-PATIENT ANTIMICROBIAL DRUG THERAPY FOR TUBERCULOSIS
BY HEALTH DISTRICT, AGE-GROUP AND SEX, AS OF DECEMBER 31, 1982

HEALTH DISTRICT	0 - 14		15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 +		Totals[1]		GRAND TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
East Kootenay	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1
Selkirk	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	2	3
West Kootenay	-	-	-	-	-	1	-	-	-	-	-	-	3	-	3	1	4
North Okanagan	-	-	-	1	-	-	1	-	-	-	-	1	2	-	3	2	5
South Okanagan	-	1	-	-	-	-	3	-	1	-	-	1	2	-	6	2	8
South Central	-	1	-	-	1	-	1	2	2	2	1	-	2	-	7	5	12
Upper Fraser	2	1	1	-	-	2	1	1	-	-	1	-	1	-	6	4	10
Central Fraser	-	-	-	-	-	2	1	1	-	-	1	-	-	2	2	5	7
Boundary	-	-	-	-	2	4	1	2	1	2	2	-	3	3	9	11	20
Simon Fraser	-	-	-	-	-	1	1	2	1	1	2	-	-	1	4	5	9
Coast Garibaldi	1	-	-	-	-	-	-	-	-	1	1	-	-	-	2	1	3
Central Vancouver Island	-	-	1	2	1	-	2	2	5	-	1	-	2	1	12	5	17
Upper Island	-	-	1	1	1	4	-	-	-	1	-	1	-	1	2	8	10
Cariboo *	-	1	-	1	1	2	3	-	2	1	-	1	1	1	7	7	14
Skeena	5	4	1	1	1	-	3	4	1	1	-	1	1	1	12	12	24
Peace River	3	1	1	1	2	1	-	-	1	-	-	-	2	-	9	3	12
Northern Interior	-	-	3	-	-	-	3	1	2	2	2	1	4	-	14	4	18
Capital Regional District Community Health Service	-	1	1	-	2	-	1	2	1	-	1	2	6	4	12	9	21
Greater Vancouver																	
Vancouver City	3	3	10	12	16	11	10	18	24	6	15	10	33	11	111	71	182
Richmond	1	-	1	1	1	-	1	-	-	-	2	2	3	3	9	6	15
Burnaby	-	-	4	1	1	2	1	1	-	-	2	-	1	-	9	4	13
North Vancouver	-	-	1	-	1	3	-	2	-	-	1	1	1	1	4	7	11
Stikine Nursing Area	-	1	-	-	-	-	-	1	1	-	-	-	-	-	1	2	3
Not Stated Sex/School District	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL	15	14	25	21	30	33	34	39	42	17	32	22	68	30	246	176	423

[1] Includes 59 Registered Indians

Note: An additional 14 persons were receiving antimicrobial drug therapy for mycobacteria other than m.Tuberculosis.

* Includes Ocean Falls Nursing District.

SECTION III - DIAGNOSTIC & SURVEY CLINICS

(Tables 11 - 15)

Table 11.

DIAGNOSTIC SERVICES PROVIDED BY TUBERCULOSIS CONTROL
British Columbia, 1982

	WILLOW CHEST CLINIC			NEW WESTMINSTER CHEST CLINIC			VICTORIA & ISLAND CHEST CLINIC			TRAV. CLINIC	TOTAL
	DIAGNOSTIC	SURVEY	MOBILE	DIAG.	SURVEY	FVTC	DIAG.	SURVEY	ISL. TRAV		
Patient Visits	8717	14848	-	4907	4976	197	3026	4213	2976	311	44,169
Patients X-rayed By Clinic											
1st Exam	923	3331	-	589	1401	-	438	1753	-	-	8,435
Re-examination	5267	2739	-	1728	446	-	2095	2460	-	-	14,735
Sub-Total	6190	6070	-	2317	1847	-	2533	4213	-	-	23,170
X-rays Taken	8036	-	1971	2717	-	-	2954	-	-	-	15,678
Outside X-ray Examinations	727	-	1126	427	-	2433	-	-	3299[1]	6511[2]	14,523
Physicians Interviews	6965	-	-	1308	-	197	2945	-	805	311	12,531
Consultant Services	7	-	-	124	-	-	38	-	-	-	169
Nursing Interviews	6508	5902	-	1080	1719	-	5169	-	-	-	20,378
Tuberculin Tests Given	517	5902	-	1096	1506	-	2987	-	-	-	12,008
Sputum Bottles Given	6167[3]	-	-	1151	-	-	461	-	-	-	7,779

[1] Includes 495 films from Nanaimo Special Survey

[2] Includes 568 films received from private radiologists, Immigration for interpretation by the Division.

[3] Includes 28 gastric washings.

TUBERCULOSIS
SURVEY CHEST X-RAY SERVICES
CONDITIONS
BRITISH

Table 12.

CLINICS	TOTAL X-RAYED	ABNORMALITIES	TOTAL	NEW PULMONARY T.B. CASES			NEW NON-PULMONARY T.B. CASES		TOTAL
			New Tuberculosis Cases	Active	Presumed T.B. Inactive	Inactive	Active (Pleurisy)	Inactive	Known Tuberculosis Cases
Willow Chest Clinic	6070	413	53	10	39	4	-	-	5
Victoria & Island Chest Clinic	4213	17	1	-	1	-	-	-	-
New Westminster Chest Clinic	1847	65	8	-	8	-	-	-	1
Mobile Clinic [1] X-ray Van	1971	414	6	1	4	1	-	-	51
Referrals [2]	1126	65	-	-	-	-	-	-	16
TOTAL	15227	974	68	11	52	5	-	-	73
RATE PER 100,000		6396	446	72	341	33			

[1] X-ray van during this period was screening institutions for the aged exclusively.

[2] Large x-rays received from hospitals for reading by Mobile Clinics

N.B. Diagnostic categories in Table 12 refer to final outcome.

CONTROL
BY CLINIC AND ABNORMAL
DETECTED.
COLUMBIA, 1982

KNOWN PULMONARY T.B. CASES			KNOWN NON-PULMONARY T.B.CASES		Non-Tuberculous Conditions					
Active	Presumed T.B. Inactive	Inactive	Active	Inactive	Other	Negative after Review	Pleurisy	Cardiac	Calcification & Healed Primary Complex	Negative X-rays Chemoprophylaxis started
-	2	2	-	1	147	48	48	3	79	10
-	-	-	-	-	8	6	4	-	-	-
-	1	-	-	-	21	36	3	1	5	-
-	13	34	-	4	319	1	41	15	81	-
-	3	11	-	2	14	3	8	2	22	-
-	19	47	-	7	407	108	104	21	187	10

Table 13. NEW X-RAY EXAMINATIONS AND RE-EXAMINATIONS OF PATIENTS BY CLINICS OF TUBERCULOSIS CONTROL
British Columbia, 1976-1982

YEAR	TOTAL	STATIONARY CLINIC		MOBILE
		New Examinations	Re-Examinations	
1976	63,936	15,151	20,797	27,988
1977	55,104	14,239	20,935	19,930
1978	86,450	16,224	29,065	20,230[1]
1979	81,190	20,311	29,760	15,651[1]
1980	54,882	14,651	20,523	4,075[1]
1981	31,335	11,637	17,664	2,034[1]
1982	39,664[2]	8,435	14,735	3,097[1]

[1]Includes large x-rays received from hospitals for reading by Mobile Survey.

[2]Includes 13,397 referred for consultation and requested by T.B. Control.

Table 14. X-RAYS READ BY TUBERCULOSIS CONTROL.
(INCLUDES X-RAYS TAKEN BY TUBERCULOSIS CONTROL AND THOSE REFERRED IN FROM OUTSIDE SOURCES.)

British Columbia, 1976 - 1982

YEAR	INSTITUTIONS (In-patients)	STATIONARY		TRAVELLING DIAGNOSTIC[2]	MOBILE CLINIC		STATIONARY METROPOLITAN & PROVINCIAL HEALTH UNITS	TOTAL
		Diagnostic[1]	Survey		VAN	GENERAL HOSPITALS[3]		
1976	1,300	24,539	35,948	14,852	27,988	364	13,493	118,114
1977	1,122	22,767	35,174	15,174	19,930	5,090	4,387	103,638
1978	454	23,673	29,844	15,254	15,022	5,494	4,276	94,017
1979	444	23,280	23,192	13,204	12,152	3,752	3,608	79,632
1980	425	19,718	20,194	14,965	1,454	2,707	1,016	60,479
1981	568	17,501	15,300	12,495	230	1,846[5]	-	47,940
1982	453[4]	14,134	12,130	12,243	1,971	1,134[5]	-	42,065

[1]Includes films from Riverview.

[2]Films received from the District.

[3]Includes large x-rays received from hospitals for reading by Mobile Clinic

[4]All these x-rays taken by Willow Chest Centre

[5]Includes 8 x-rays taken as part of routine hospital admission programme.

Table 15.

ANNUAL RETURN OF B.C.G. VACCINATIONS,
British Columbia, 1981 & 1982

GROUPS TO WHOM B.C.G. VACCINATIONS WERE GIVEN	WILLOW CHEST CLINIC		VICTORIA & ISLAND CHEST CLINIC		NEW WESTMINSTER STATIONARY CLINIC		HEALTH[1] UNITS		PACIFIC REGION HEALTH SERVICES		B.C.I.T.		TOTAL	
	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982	1981	1982
OCCUPATIONAL GROUPS														
Nurses	2	1	-	-	-	2	-	1	-	-	156	102	158	106
Other Hospital Personnel	-	1	-	-	-	-	1	-	-	-	-	-	1	1
Medical Students	7	1	-	-	-	-	-	1	-	-	-	-	7	2
NATIVE INDIANS (REGISTERED)														
Newborn	-	-	-	-	-	-	11	28	345	430[2]	-	-	356	458
Children & Adults	-	-	-	-	-	-	14	13	174	100	-	-	188	113
ALL OTHER PERSONS														
Newborn (Contacts)	-	-	-	-	-	1	-	2	-	-	-	-	-	3
Newborn (Not Contacts)	-	1	-	-	1	1	-	-	-	-	-	-	1	2
Children & Adults (Contacts)	9	18	-	-	3	1	1	-	-	-	-	-	13	19
Children & Adults (Not Contacts)	21	10	3	-	6	11	3	8	-	-	-	-	33	29
TOTAL	39	32	3	-	10	16	30	53	519	530	156	102	757	733

[1] Given by Provincial Health Units.

[2] In 1982, 632 Native Indians (Registered and on reserve) were born and of those 342 (55%) received B.C.G. vaccine (Data courtesy of Medical Services, Pacific Region).

SECTION IV - NEW ACTIVE TUBERCULOSIS

(Tables 16 - 31 & Charts 1 - 5)

Table 16. INCIDENCE OF NEW ACTIVE TUBERCULOSIS BY AGE-GROUP AND SEX,
British Columbia, 1962

	MALES				FEMALES				TOTAL			
	BACILLARY CASES		ALL ACTIVE CASES		BACILLARY CASES		ALL ACTIVE CASES		BACILLARY CASES		ALL ACTIVE CASES	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0 - 14	1	0.3	17	5.6	4	1.4	23	8.0	5	1.0	40	6.8
15 - 24	17	5.9	23	9.3	18	6.2	25	10.3	32	6.5	48	9.8
25 - 34	22	6.0	32	13.0	30	12.3	40	16.4	52	10.6	72	14.7
35 - 44	20	11.5	27	15.5	16	9.6	25	15.0	36	10.6	52	15.2
45 - 54	26	18.1	35	24.3	9	6.6	14	10.3	35	12.5	49	17.5
55 - 64	33	27.2	44	36.3	13	9.6	19	14.0	46	17.9	63	24.5
65 - 74	28	32.4	33	38.2	16	16.0	20	20.0	44	23.6	53	28.4
75 & Over	18	37.6	20	44.0	15	22.6	21	31.7	33	30.0	41	36.7
TOTAL	165	12.1	231	16.9	118	8.6	187	13.6	283	10.3	418	15.2

Rates per 100,000 population

Table 17. NEW ACTIVE TUBERCULOSIS FOR ALL CASES AND BACILLARY ONLY, British Columbia, 1976 - 1982.

YEAR	MALES				FEMALES				TOTAL			
	BACILLARY CASES		ALL ACTIVE CASES		BACILLARY CASES		ALL ACTIVE CASES		BACILLARY CASES		ALL ACTIVE CASES	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1976	173	14.0	219	17.7	108	8.6	165	13.4	279	11.3	384	15.6
1977	165	13.3	196	15.7	123	9.9	172	13.8	288	11.6	368	14.8
1978	205	16.5	253	20.3	113	9.0	157	12.5	318	12.7	410	16.4
1979	139	14.0	235	18.4	97	7.0	150	11.6	270	10.5	385	15.0
1980	193	14.7	252	19.2	94	7.2	146	11.0	287	10.9	398	15.1
1981	167	12.7	210	15.8	120	9.0	168	12.7	287	10.9	378	14.3
1982	165	12.1	231	16.9	118	8.6	187	13.6	283	10.3	418	15.2

Rates per 100,000 population

Table 18. ACTIVE TUBERCULOSIS
AGENCY PROVIDING INITIAL INVESTIGATION (USUALLY X-RAY) LEADING TO THE DIAGNOSIS.
British Columbia, 1982

SOURCE	1981	1982
UNITS OF THE DIVISION:		
Willow Chest Centre:		
Survey Clinic	12	10
Diagnostic Clinic	27	54
New Westminster Chest Centre:		
Survey Clinic	-	-
Diagnostic Clinic	5	12
Victoria & Island Chest Centre:		
Survey Clinic	-	-
Diagnostic Clinic	8	7
Travelling Clinic	17	16
(Verification by Travelling Clinic)	(7)	-
Mobile Clinic	1	1
TOTAL	77	100
Percent	20.4%	24%
INDIAN HEALTH SERVICES:		
Indian Health Services	10	4
Indian Mobile	4	5
TOTAL	14	9
Percent	4%	2%
OTHER:		
Private Radiologist	56	56
Private Physician's Office	5	6
Mental Health Services	(1)	-
Ex-Province (including Immigration)	10	5
Provincial Jails (LMRCC & Prince George)	1	2
TOTAL	73	69
Percent	17%	17%
GENERAL HOSPITALS:		
Survey Admission X-ray	(1)	-
Diagnostic Film: Out-patient	35	60
" " In-patient	85	85
Diagnosed in hospital on basis other than x-ray	64	58
Day care (basis other than x-ray)	13	23
TOTAL	198	226
Percent	52.4%	54%
NOTIFIED ON DEATH:		
Notified on death	12	10
Notified on death; T.B. diagnosed during life	4	4
TOTAL	16	14
Percent	4.2%	3%
GRAND TOTAL	378	418
PERCENT	100%	100%

Table 19A. PRINCIPAL DIAGNOSIS OF ACTIVE TUBERCULOSIS, AND BACILLARY CASES, British Columbia, 1982

DIAGNOSIS	BACILLARY ONLY		ALL ACTIVE CASES		BACILLARY AS PERCENT OF ALL ACTIVE CASES
	Number	Percent	Number	Percent	
PULMONARY:					
Primary	4	1.4	37	8.8	10.8
Minimal	96	34.0	131	31.3	72.5
Moderately Advanced	67	23.7	71	17.0	91.6
Far Advanced	45	15.9	47	11.2	95.7
Miliary	12	4.2	15	3.6	80.0
Tuberculoma	-	-	2	0.5	-
Pleurisy	8	2.8	21	5.0	38.1
NON-PULMONARY:					
Meninges and Central Nervous System	4	1.4	4	1.0	100.0
Intestines and Peritoneum	4	1.4	5	1.2	80.0
Bones and Joints	4	1.4	5	1.2	80.0
Skin and Subcutaneous Cell Tissue	2	0.7	6	1.4	33.3
Lymphatic System	28	9.9	55	13.2	51.0
Genito-Urinary System	7	2.8	15	3.6	46.7
Multiple Sites and Other Organs	2	0.7	4	1.0	50.0
TOTAL	283	100.0	418	100.0	67.7

Table 19B. PRINCIPAL DIAGNOSIS OF ACTIVE TUBERCULOSIS, AND BACILLARY CASES, British Columbia, 1981

DIAGNOSIS	BACILLARY ONLY		ALL ACTIVE CASES		BACILLARY AS PERCENT OF ALL ACTIVE CASES
	Number	Percent	Number	Percent	
PULMONARY:					
Primary	4	1.4	22	5.8	18.2
Minimal	102	35.5	133	35.2	76.7
Moderately Advanced	80	27.9	84	22.1	95.2
Far Advanced	36	12.5	38	10.1	94.7
Miliary	12	4.3	12	3.2	100.0
Silico-Tuberculosis	1	0.3	1	0.3	100.0
Pleurisy	5	1.7	10	2.6	50.0
Other Pulmonary (Extent Unknown)	1	0.3	3	0.8	33.3
NON-PULMONARY:					
Meninges and Central Nervous System	1	0.3	2	0.5	50.0
Intestines and Peritoneum	1	0.3	3	0.8	33.3
Bones and Joints	4	1.4	6	1.6	66.7
Skin and Subcutaneous Cell Tissue	-	-	1	0.3	-
Lymphatic System	30	10.6	49	13.0	61.2
Genito-Urinary System	10	3.5	13	3.4	76.9
Multiple Sites and Other Organs	-	-	1	0.3	-
TOTAL	287	100.0	378	100.0	76.0

Table 20A. PRINCIPAL DIAGNOSIS OF ACTIVE TUBERCULOSIS, AMONG NON-INDIANS AND INDIANS, British Columbia, 1982

DIAGNOSIS	NON-INDIANS[1]		REGISTERED INDIANS	
	Number	Percent	Number	Percent
PULMONARY:				
Primary	34	9.1	3	7.0
Minimal	114	30.4	17	39.5
Moderately Advanced	62	16.5	9	21.0
Far Advanced	43	11.5	4	9.3
Miliary	12	3.2	3	7.0
Tuberculoma	2	0.5	-	-
Pleurisy	20	5.4	1	2.3
NON-PULMONARY:				
Meninges and Central Nervous System	3	0.8	1	2.3
Intestines and Peritoneum	5	1.3	-	-
Bones and Joints	5	1.3	-	-
Skin and Subcutaneous Cell Tissue	5	1.3	1	2.3
Lymphatic System	51	13.6	4	9.3
Genito-Urinary System	15	4.0	-	-
Multiple Sites and Other Organs	4	1.1	-	-
TOTAL	375	100.0	43	100.0

[1] Includes 22 non-status Indians.

Table 20B. PRINCIPAL DIAGNOSIS OF ACTIVE TUBERCULOSIS, AMONG NON-INDIANS AND INDIANS, British Columbia, 1981.

DIAGNOSIS	NON-INDIANS[1]		REGISTERED INDIANS	
	Number	Percent	Number	Percent
PULMONARY:				
Primary	14	4.4	8	14.0
Minimal	111	34.6	22	38.5
Moderately Advanced	73	22.7	11	19.3
Far Advanced	36	11.3	2	3.5
Miliary	8	2.5	4	7.0
Silico-Tuberculosis	1	0.3	-	-
Pleurisy	9	2.8	1	1.8
Tuberculoma	3	0.9	-	-
NON-PULMONARY:				
Meninges and Central Nervous System	1	0.3	1	1.8
Intestines and Peritoneum	2	0.6	1	1.8
Bones and Joints	6	1.9	-	-
Skin and Subcutaneous Cell Tissue	1	0.3	-	-
Lymphatic System	44	13.7	5	8.8
Genito-Urinary System	11	3.4	2	3.5
Multiple Sites and Other Organs	1	0.3	-	-
TOTAL	321	100.0	57	100.0

[1] Includes 13 non-status Indians.

Table 21. ACTIVE[1] TUBERCULOSIS, BY AGE GROUP, SEX & DIAGNOSIS,
(Bacillary only)
British Columbia, 1982

DIAGNOSIS ON NOTIFICATION		AGE GROUP							
		0-14	15-24	25-34	35-44	45-54	55-64	65+	TOTAL
PULMONARY:									
Primary	M	1	1	-	-	-	-	-	2
	F	2	-	-	-	-	-	-	2
Minimal	M	-	6	7	5	6	11	16	51
	F	-	6	11	4	2	8	14	45
Moderately Advanced	M	-	-	4	2	8	9	13	36
	F	-	5	9	5	2	-	10	31
Far Advanced	M	-	5	4	8	3	10	11	41
	F	-	-	1	1	-	-	2	4
Miliary	M	-	1	1	-	3	1	2	8
	F	-	-	1	-	-	1	2	4
Pleurisy	M	-	2	-	1	2	1	-	6
	F	-	-	-	2	-	-	-	2
TOTAL PULMONARY	M	1	15	16	16	22	32	42	144
	F	2	11	22	12	4	9	28	88
	T	3	26	38	28	26	41	70	232
NON-PULMONARY:									
Skin	M	-	-	-	-	-	-	-	-
	F	-	-	1	-	-	-	1	2
Intestines & Peritoneum	M	-	-	-	-	1	-	-	1
	F	-	-	1	-	1	-	1	3
Bones & Joints	M	-	-	-	1	-	-	1	2
	F	-	-	-	-	-	1	1	2
Meninges & Central Nervous System	M	-	-	1	-	1	-	-	2
	F	1	-	-	-	1	-	-	2
Lymphatic System	M	-	2	4	2	2	-	2	12
	F	1	3	4	4	2	2	-	16
Genito-Urinary	M	-	-	1	1	-	1	1	4
	F	-	-	1	-	1	1	-	3
Multiple Sites & Other Organs	M	-	-	-	-	-	-	-	-
	F	-	1	1	-	-	-	-	2
TOTAL NON-PULMONARY	M	-	2	6	4	4	1	4	21
	F	2	4	8	4	5	4	3	30
	T	2	6	14	8	9	5	7	51
TOTAL NOTIFICATIONS	M	1	17	22	20	26	33	46	165
	F	3	15	30	16	9	13	31	118
	T	4	32	52	36	35	46	77	283

[1] Includes active and reactivated cases

ACTIVE[1] TUBERCULOSIS, BY AGE GROUP, SEX & DIAGNOSIS,
(All Active Cases)
Table 22 British Columbia, 1982

DIAGNOSIS ON NOTIFICATION		AGE GROUP							TOTAL
		0-14	15-24	25-34	35-44	45-54	55-64	65+	
PULMONARY:									
Primary	M	14	2	1	-	-	-	-	17
	F	19	1	-	-	-	-	-	20
Minimal	M	1	7	10	8	8	17	16	67
	F	2	9	18	7	3	10	15	64
Moderately Advanced	M	-	-	4	3	9	9	14	39
	F	-	5	9	5	2	-	11	32
Far Advanced	M	-	5	4	8	3	10	12	42
	F	-	-	1	1	-	-	3	5
Miliary	M	-	1	2	-	3	1	2	9
	F	-	-	1	-	-	1	4	6
Silico-Tuberculosis	M	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
Pleurisy	M	1	4	1	2	2	2	3	15
	F	-	1	-	2	2	-	1	6
Tuberculoma	M	-	-	-	-	-	-	-	-
	F	-	-	-	1	-	1	-	2
TOTAL PULMONARY	M	16	19	22	21	25	39	47	189
	F	21	16	29	16	7	12	34	135
	T	37	35	51	37	32	51	81	324
NON-PULMONARY:									
Meninges & Central Nervous System	M	-	-	1	-	1	-	-	2
	F	1	-	-	-	1	-	-	2
Intestines & Peritoneum	M	-	-	-	-	1	1	-	2
	F	-	-	1	-	1	-	1	3
Bones & Joints	M	-	-	1	1	-	-	1	3
	F	-	-	-	-	-	1	1	2
Skin	M	-	-	-	-	1	-	-	1
	F	-	1	1	1	-	1	1	5
Lymphatic System	M	1	4	6	4	5	2	4	26
	F	1	5	7	6	4	3	3	29
Genito-Urinary System	M	-	-	2	1	2	2	1	8
	F	-	1	1	2	1	2	-	7
Multiple Sites	M	-	-	-	-	-	-	-	-
	F	-	2	1	-	-	-	1	4
TOTAL NON-PULMONARY	M	1	4	10	6	10	3	6	42
	F	2	9	11	9	7	7	7	52
	T	3	13	21	15	17	12	13	94
TOTAL NOTIFICATIONS	M	17	23	32	27	35	44	54	231
	F	23	25	40	25	14	19	41	187
	T	40	48	72	51	49	63	95	418

1) Includes active and reactivated cases.

Table 23. ACTIVE[1] TUBERCULOSIS BY HEALTH DISTRICT OF RESIDENCE, FOR BACILLARY CASES AND ALL ACTIVE CASES, British Columbia, 1982

HEALTH DISTRICT	BACILLARY		ALL ACTIVE CASES		
			TOTAL POPULATION		OTHER THAN[2] INDIAN
	Number	Rate[3]	Number	Rate[3]	Number
East Kootenay	4	5.7	4	5.7	4
Kalkirk	-	-	1	3.4	1
West Kootenay	-	-	-	-	-
North Okanagan	5	6.0	9	10.9	7
South Okanagan	9	6.1	11	7.5	11
South Central	3	2.8	6	5.6	4
Upper Fraser Valley	4	3.6	5	4.5	5
Central Fraser Valley	9	7.4	11	9.0	11
Boundary	20	8.5	29	12.3	29
Simon Fraser	5	3.5	10	7.0	10
Comox-Garibaldi	3	6.1	4	8.1	3
Central Vancouver Island	13	8.0	20	12.3	17
Upper Island	3	3.6	8	9.6	5
Cariboo	10	17.0	12	20.4	5
Skeena	8	10.2	12	15.3	6
Peace River	5	9.0	6	10.8	5
Northern Interior	8	7.0	14	12.3	11
Metropolitan Board of Health of Greater Vancouver	159	20.1	228	28.8	216
Capital Regional District Community Health Services	14	5.6	27	10.8	25
Ocean Falls Nursing District	-	-	-	-	-
Unallocated	1	-	1	-	-
TOTAL	283	10.3	418	15.2	375

[1] Includes active and reactivated cases

[2] Includes 22 non-status Indians

[3] Rates per 100,000 estimated population.

Table 24. BACTERIOLOGICAL STATUS OF ACTIVE CASES OF PULMONARY TUBERCULOSIS, British Columbia, 1982

	EXAMINED			NOT EXAMINED[1]	TOTAL
	POSITIVE SMEAR	POSITIVE CULTURE ONLY	NEGATIVE		
TOTAL MALES AND FEMALES					
Number of Cases . . .	144	88	61	31	324
Percent	44.4	27.2	18.8	9.6	100.0
MALES					
Number of Cases . . .	97	47	29	16	189
Percent	51.3	24.9	15.3	8.5	100.0
FEMALES					
Number of Cases . . .	47	41	32	15	135
Percent	34.8	30.4	23.7	11.1	100.0

[1] Includes persons from whom sputum or gastric lavage was not obtainable, i.e. deaths, young children and the aged.

Table 25. ACTIVE TUBERCULOSIS ARISING IN PERSONS IN VARIOUS DIAGNOSTIC CATEGORIES ROUTINELY FOLLOWED UP BY TUBERCULOSIS CONTROL CLINICS, British Columbia, 1982

DIAGNOSIS	NUMBER OF CASES	PERCENT
REACTIVATION I		
Inactive Tuberculosis (Previously documented)	55	13.2
REACTIVATION II		
Presumed Pulmonary Tuberculosis Inactive. .	16	3.8
PRE-EXISTING CHEST X-RAY ABNORMALITY - OTHER		
Pulmonary Fibrosis (Localised and Diffuse).	19	4.5
Old Pleurisy & Other Pleural Changes . . .	5	1.2
Healed Primary Complex	5	1.2
Hilar Calcification	2	0.5
Emphysema	2	0.5
Solitary Lung Densities	3	0.7
Other conditions.	5	1.2
NO KNOWN PRE-EXISTING CHEST X-RAY ABNORMALITY		
Negative X-ray	66	15.8
X-rays Not Taken or Available	240	57.4
TOTAL CASES	418	100.0

Table 26A. INCIDENCE OF ACTIVE[1] TUBERCULOSIS
BY RACIAL ORIGIN
British Columbia, 1982

RACIAL ORIGIN	BACTERIOLOGICALLY CONFIRMED CASES		TOTAL ACTIVE TUBERCULOSIS	
	Number of Cases	Rate[2]	Number of Cases	Rate[2]
White and Others	126	4.5	185	6.6
Indian - Registered	36	59.6	43	71.2
Indian - Non-Status	11	(3)	20	(3)
Chinese	57	86.5	85	129.1
Japanese - Korean	3	(4)	6	(4)
East Indian	23	70.2	44	145.7
Vietnamese	16	(4)	24	(4)
Filipino	11	(4)	11	(4)

[1]Includes active and reactivated cases

[2]Rates per 100,000 population based on estimated population only.

[3]Rates for non-status Indians calculated with "White and Others".

[4]Population not known.

Table 26B. INCIDENCE OF ACTIVE[1] TUBERCULOSIS AMONG CANADIAN BORN AND NON-CANADIAN BORN, British Columbia, 1982

	BACTERIOLOGICALLY CONFIRMED CASES		TOTAL ACTIVE TUBERCULOSIS	
	Number of Cases	Rate[2]	Number of Cases	Rate[2]
CANADIAN BORN	137	6.7	198	9.6
NON-CANADIAN BORN	146	21.3	220	32.1
FOREIGN BORN:				
Canadian Citizen . . .	46		70	
Landed Immigrant . . .	87		129	
Ministers Permit. . . . (Non-landed immigrants)	2		4	
Visitors (Sailors,etc.).	5		6	
Student Visas	-		-	
Not known	6		11	

[1]Includes active and reactivated cases.

[2]Rates per 100,000 population based on estimated population only.

Table 27. CONTRIBUTION OF REACTIVATIONS TO TOTAL ACTIVE TUBERCULOSIS CASES BY AGE GROUP British Columbia, 1982

TYPE OF CASE	Age-Group				
	0-24	25-44	45-64	65+	TOTAL
ALL ACTIVE CASES					
TOTAL Number of Cases	88	[illegible]	112	94	418
Number of Reactivations I	1	16	16	22	55
Percent of Reactivations I	1.1	12.9	14.3	23.4	13.2
Number of Reactivations II.	1	2	7	6	16
Percent of Reactivations II	1.1	1.6	6.3	6.4	3.8
Total Reactivations					71
BACTERIOLOGICALLY CONFIRMED CASES ONLY					
TOTAL Number of Cases	37	88	81	77	283
Number of Reactivations I	-	12	12	18	42
Percent of Reactivations II	-	13.6	14.8	23.4	14.8
Number of Reactivations II.	-	1	6	6	13
Percent of Reactivations II	-	1.1	7.4	7.8	4.6
Total Reactivations					55

Reactivations I: Derived from Inactive Tuberculosis Cases (previously documented active).

Reactivations II: Derived from Presumed Pulmonary Tuberculosis, Inactive (not previously documented active tuberculosis cases).

Table 28

TOTAL ACTIVE CASES OF TUBERCULOSIS
(NEW ACTIVE AND REACTIVATED* CASES)
RATES PER 100,000 AGE-SPECIFIC (ESTIMATED) POPULATION
British Columbia, 1973-1982

AGE-GROUP	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
0 - 14 Years	5.4	4.2	3.7	4.5	2.7	6.6	7.2	4.9	4.3	6.8
15 - 24 Years	11.5	11.7	8.6	9.0	7.0	10.3	7.1	8.7	8.1	9.8
25 - 34 Years	23.6	23.8	19.5	15.4	14.7	14.3	13.6	12.5	14.0	14.7
35 - 44 Years	25.7	30.3	22.9	21.3	22.5	18.6	20.1	18.0	18.0	15.2
45 - 54 Years	31.8	25.6	31.0	17.9	24.2	21.9	20.4	19.9	19.5	17.5
55 - 64 Years	34.5	32.2	28.4	29.4	21.7	25.3	21.6	22.0	22.4	24.5
65 - 74 Years	46.0	33.9	41.0	29.8	35.1	32.3	27.5	28.5	32.5	28.4
75 Years & Over . . .	38.5	41.1	40.2	41.4	32.0	45.3	35.9	51.5	25.3	36.7

* Includes Reactivations I: Derived from Inactive Tuberculosis Cases (previously documented active).
and Reactivations II: Derived from Presumed Pulmonary Tuberculosis Inactive (not previously documented active tuberculosis cases).

Table 29. NEW ACTIVE AND REACTIVATED* TUBERCULOSIS CASES AMONG ALL RACES, EXCLUDING REGISTERED INDIANS, British Columbia, 1977-1982

AGE-GROUP	1977		1978		1979		1980		1981		1982	
	New Active	Reactivation	New Active	Reactivation	New Active	Reactivation	New Active	Reactivation	New Active	Reactivation	New Active	Reactivation
0 - 14. .	12	-	19	-	32	-	23	-	18	1	36	-
15 - 24. .	27	1	29	-	27	2	38	2	33	-	44	2
25 - 44. .	74	10	75	3	89	9	83	8	96	5	94	11
45 - 54. .	42	12	38	5	34	10	38	8	37	6	33	6
55 - 64. .	36	6	41	13	37	7	36	10	36	12	48	12
65 & Over.	58	21	56	23	64	9	76	21	62	15	62	27
TOTAL. . .	249	50	258	50	283	37	294	49	282	39	317	58

* Includes Reactivations I: Derived from Inactive Tuberculosis Cases(previously documented active).
and Reactivations II: Derived from Presumed Pulmonary Tuberculosis Inactive(not previously documented active tuberculosis cases.)

Table 30. NEW ACTIVE AND REACTIVATED* TUBERCULOSIS CASES AMONG REGISTERED INDIANS, British Columbia, 1977-1982

AGE-GROUP	1977		1978		1979		1980		1981		1982	
	New Active	Reacti-vation	New Active	Reacti-vation	New Active	Reacti-vation	New Active	Reacti-vation	New Active	Reacti-vation	New Active	Reacti-vation
0 - 14. .	3	-	16	-	9	-	5	-	6	-	4	-
15 - 24. .	2	-	17	-	5	-	3	-	7	-	2	-
25 - 44. .	23	7	20	6	13	9	15	8	15	5	12	7
45 - 54. .	9	-	7	5	5	7	7	1	6	4	5	5
55 - 64. .	6	1	1	4	6	2	4	4	5	2	3	-
65 & Over.	5	-	14	-	6	3	5	3	5	2	4	1
TOTAL. . .	48	8	75	15	44	21	39	16	44	13	30	13

*Includes Reactivations I: Derived from Inactive Tuberculosis Cases (previously documented active).
and Reactivations II: Derived from Presumed Pulmonary Tuberculosis Inactive (not previously documented active tuberculosis cases)

Table 31. ALL ACTIVE CASES OF TUBERCULOSIS BY MAJOR OCCUPATION GROUPS AND BACTERIOLOGICAL STATUS, British Columbia, 1982

OCCUPATION	Smear Positive	Culture Positive	Negative	No Bacteriology Done	TOTAL
Managerial Occupations	5	4	3	-	12
Professional/Technical	3	3	8	2	16
Clerical	5	6	3	5	19
Sales	2	3	-	1	6
Service & Recreation	8	7	7	4	26
Transport & Communications	3	1	-	1	4
Loggers	-	1	-	-	1
Fishing/Trapping	4	2	-	-	6
Farmers & Farm Workers	2	1	1	-	4
Craftsmen, Production Process Workers	11	7	7	5	30
Laborers	4	2	-	1	7
Miners/Quarrymen	2	-	-	-	2
Retired	30	28	5	8	71
Students	8	6	17	10	41
Unemployed	36	25	7	2	70
Housewife (At Home)	32	27	15	7	81
Occupation not given	-	3	8	10	21
TOTAL	155	126	81	56	418

Chart 1. INCIDENCE OF ACTIVE TUBERCULOSIS AMONG CERTAIN SPECIFIED RACIAL GROUPS, British Columbia, 1980-1982

(Rates Per 100,000 Estimated Population)

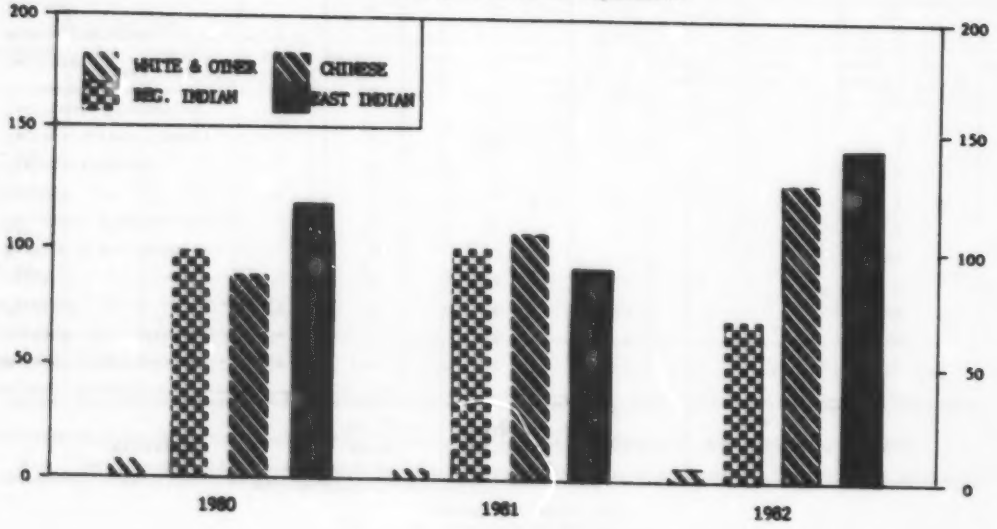
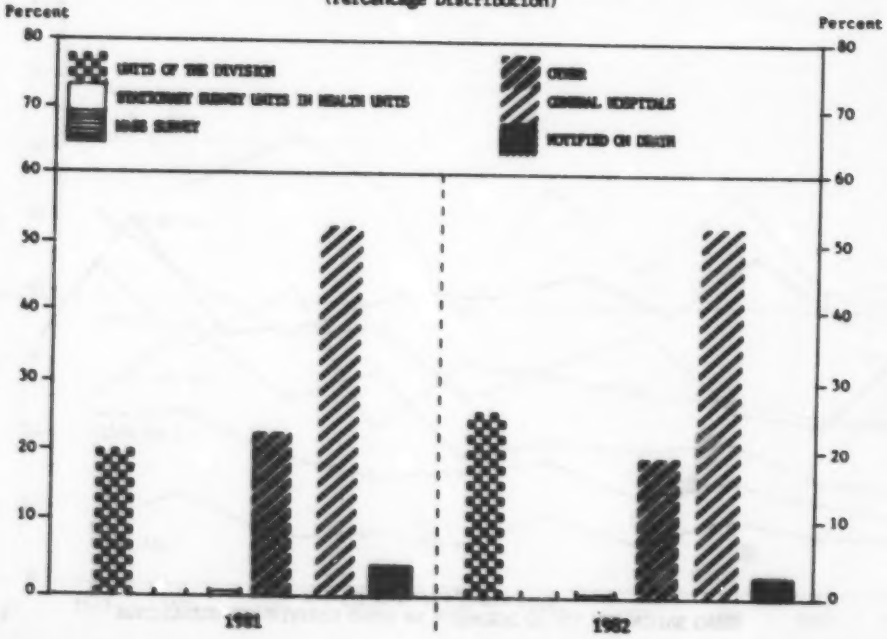


Chart 2. SOURCE OF NEW ACTIVE CASES, BY CLINIC, HOSPITAL OR OTHER HEALTH AGENCY, British Columbia, 1981 & 1982

(Percentage Distribution)



(36)

Chart 3. REACTIVATED TUBERCULOSIS CASES AS A PERCENT OF ALL NEW ACTIVE CASES
British Columbia, 1973-1982

Chart 4. ACTIVE TUBERCULOSIS AGE SPECIFIC INCIDENCE RATES FOR MALES
(Age-Group 15-65 & Over)
British Columbia, 1973-1982

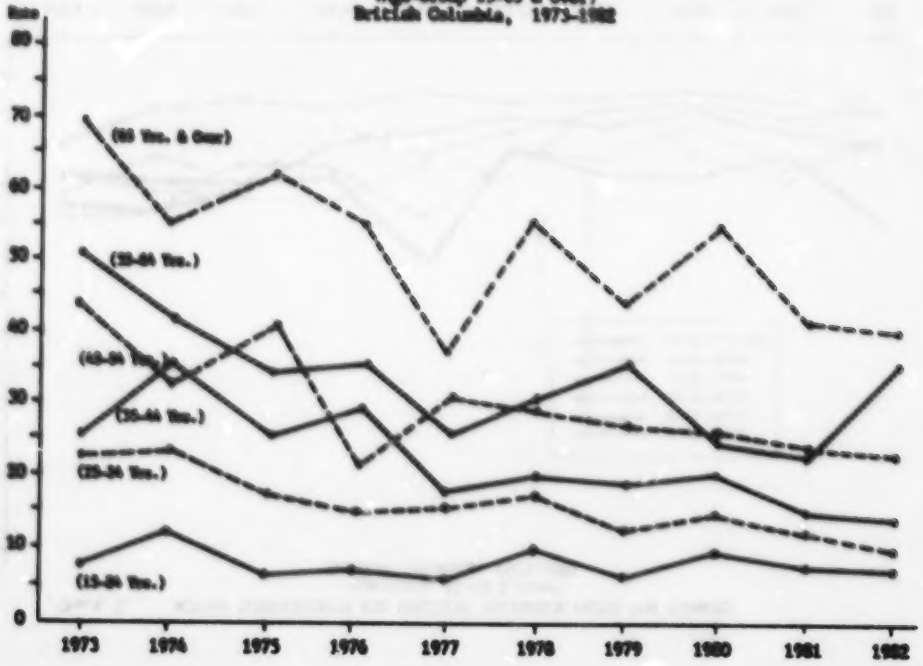
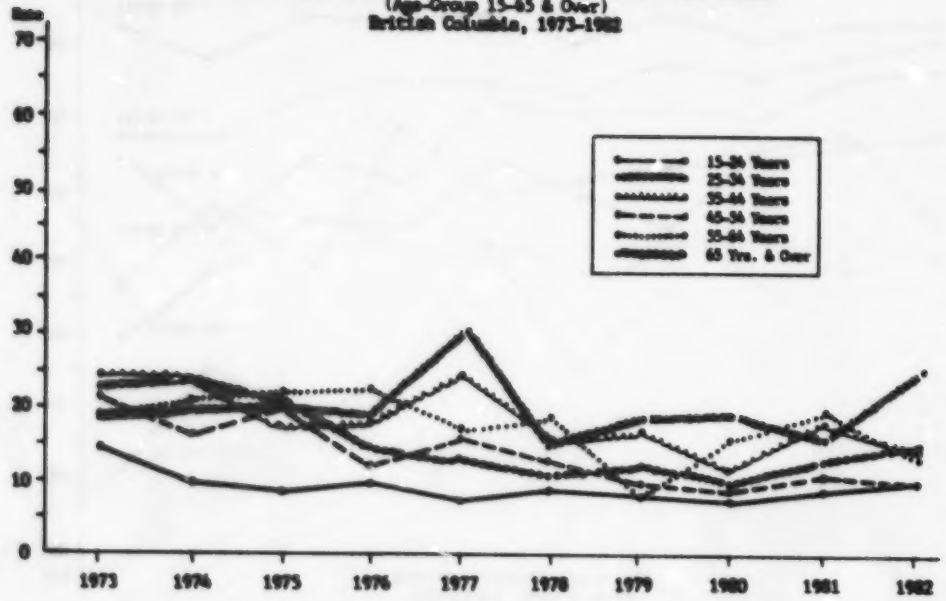


Chart 5. ACTIVE TUBERCULOSIS AGE SPECIFIC INCIDENCE RATES FOR FEMALES
(Age-Group 15-65 & Over)
British Columbia, 1973-1982



SECTION V - CONTACT TRACING

(Tables 32 - 36)

CONTACT INVESTIGATION - MORBIDITY

Table 32. BY AGE AND INITIAL TUBERCULIN STATUS OF CONTACTS AND BACILLARY STATUS OF SOURCE.
TYPE OF SOURCE: PULMONARY TUBERCULOSIS, ACTIVE, (DIAGNOSED IN 1962)
TYPE OF CONTACT: HOUSEHOLD, UNDER AND OVER 20 YEARS (DIAGNOSED IN 1962)
British Columbia, 1962.

SOURCE BACTERIOLOGY[1]	UNDER 20			20 & OVER			TOTAL		
	Total Contacts	Number Active	Morbidity Percent	Total Contacts	Number Active	Morbidity Percent	Total Contacts	Number Active	Morbidity Percent
Positive Smear & Culture									
All Contacts.	106	22	20.7	157	4	2.5	263	26	9.9
Tuberculin Positive Contacts[2]	37	22	59.4	73	4	5.5	110	26	2.4
Positive Culture Only									
All Contacts.	41	2	4.9	75	-	-	116	2	1.7
Tuberculin Positive Contacts[2]	5	2	40.0	29	-	-	34	2	5.9
Negative Smear & Culture									
All Contacts.	17	-	-	17	1	5.9	34	1	2.9
Tuberculin Positive Contacts[2]	-	-	-	6	1	16.7	6	1	16.7

[1] This table excludes source cases not bacteriologically examined and for those contacts whose age was not given.

[2] Positive tuberculin includes those with 10 mm. or greater.

CONTACT INVESTIGATION - MORBIDITY

Table 33.

BY AGE OF CONTACTS AND PROXIMITY OF CONTACT
TYPE OF SOURCE: PULMONARY TUBERCULOSIS, ACTIVE, (DIAGNOSED in 1982)
TYPE OF CONTACT: HOUSEHOLD AND NON-HOUSEHOLD, (DIAGNOSED in 1982)
British Columbia, 1982

AGE-GROUP OF CONTACTS	CONTACTS			NEW ACTIVE TB FOUND			PERCENT OF NEW ACTIVE		
	Household	Non-Household	Total	Household	Non-Household	Total	Household	Non-Household	Total
Pulmonary Source Cases									
0 - 14 Years . . .	132	200	332	22	2	24	16.7	1.0	7.3
15 - 19 Years . . .	42	264	306	3	1	4	7.1	0.4	1.3
20 - 29 Years . . .	63	361	424	2	5	7	3.2	1.4	1.6
30 - 39 Years . . .	50	251	301	2	1	3	4.0	0.4	0.9
40 Years & Over . .	144	598	742	1	1	2	0.7	0.2	0.3
TOTAL	431	1674	2105	30	10	40	7.0	0.6	1.9

Table 34.

CONTACT INVESTIGATION - MORBIDITY

BY INITIAL TUBERCULIN STATUS OF CONTACTS, PROXIMITY OF CONTACT AND BACILLARY STATUS OF SOURCE.
TYPE OF SOURCE: PULMONARY TUBERCULOSIS, ACTIVE, (DIAGNOSED IN 1982).
TYPE OF CONTACT: HOUSEHOLD AND NON-HOUSEHOLD, (DIAGNOSED IN 1982).
BRITISH COLUMBIA, 1982.

SOURCE	NUMBER OF CONTACTS LISTED				NEW ACTIVE TUBERCULOSIS FOUND				PERCENT WITH NEW ACTIVE TUBERCULOSIS		
	Household		Non-Household		Household		Non-Household				
	Tbn.+ Pos.[1]	Tbn. Neg. or Not Done	Tbn.+ Pos.[1]	Tbn. Neg. or Not Done	Tbn.+ Pos.[1]	Tbn. Neg. or Not Done	Tbn.+ Pos.[1]	Tbn. Neg. or Not Done	House-hold	Non-House-hold	TOTAL
TOTAL CASES	155	276	406	1268	30	-	9	1	7.0	0.8	1.9
Positive Smear											
Total	110	153	313	960	27	-	9	-	10.3	0.9	2.3
Positive Culture Only[2]											
Total	34	82	45	120	2	-	-	1	1.7	0.6	1.0
Negative Bacteriology											
Total	6	28	10	46	1	-	-	-	2.9	-	1.1
Not Examined											
Total	5	13	38*	142	-	-	-	-	-	-	-

[1] Includes persons with a reaction of 10 mm. or greater

[2] Includes positive culture with negative or no smear.

* Includes 1 bacteriology not stated.

NOTE: Tuberculin status is determined solely on basis of current initial test during contact evaluation. This applies to all tables giving tuberculin status of contacts which follow in this section.

Table 35. CONTACT INVESTIGATION TUBERCULIN STATUS BY AGE OF CONTACT AND BACILLARY STATUS OF SOURCE.
TYPE OF SOURCE: PULMONARY TUBERCULOSIS, ACTIVE (DIAGNOSED IN 1982)
TYPE OF CONTACT: HOUSEHOLD.
BRITISH COLUMBIA, 1982

	AGE GROUP							
	0-14	15-19	20-29	30-39	40-49	50-59	60 & Over	TOTAL
Positive Smear, Positive Culture								
Total Contacts	80	27	41	30	29	19	37	263
Tuberculin Tested	77	24	37	25	21	15	29	228
Positive[1]	25	13	24	14	10	12	12	110
Percent Positive	32.5	54.2	64.8	56.0	47.6	80.0	41.4	48.2
Positive Culture Only[2]								
Total Contacts	32	9	17	18	11	11	18	116
Tuberculin Tested	27	9	15	15	10	10	15	101
Positive[1]	3	2	3	9	7	6	4	34
Percent Positive	11.1	22.2	20.0	60.0	70.0	60.0	26.7	33.7
Negative Smear, Negative Culture								
Total Contacts	15	2	2	1	5	4	5	34
Tuberculin Tested	15	2	1	-	5	4	1	28
Positive[1]	-	-	1	-	5	-	-	6
Percent Positive	-	-	100.0	-	100.0	-	-	21.4
Not Examined								
Total Contacts	5	4	3	1	-	2	3	18
Tuberculin Tested	4	4	2	1	-	1	2	14
Positive[1]	1	-	2	-	-	1	1	5
Percent Positive	25.0	-	100.0	-	-	100.0	50.0	35.7

[1] Includes persons with a reaction of 10 mm. or greater.
[2] Includes positive culture, negative or no smear.

Table 36. CONTACT INVESTIGATION TUBERCULIN STATUS
BY AGE OF CONTACT AND BACILLARY STATUS OF SOURCE.
TYPE OF SOURCE: PULMONARY TUBERCULOSIS, ACTIVE, (DIAGNOSED IN 1982)
TYPE OF CONTACT: NON-HOUSEHOLD.
BRITISH COLUMBIA, 1982

	AGE GROUP							
	0-14	15-19	20-29	30-39	40-49	50-59	60 & Over	TOTAL
Positive Smear, Positive culture								
Total Contacts	168	243	300	198	110	115	139	1273
Tuberculin Tested . .	146	227	255	165	98	102	79	1072
Positive[1]	20	29	76	69	51	44	24	313
Percent Positive . .	13.7	12.8	29.8	41.8	52.0	43.1	30.4	29.2
Positive Culture Only[2]								
Total Contacts	18	11	25	19	17	7	68	165
Tuberculin Tested . .	16	11	16	18	17	4	55	137
Positive[1]	1	2	4	11	11	1	15	45
Percent Positive . . .	6.3	18.2	25.0	61.1	64.7	25.0	27.3	32.8
Negative Smear, Negative Culture								
Total Contacts	11	3	13	11	3	5	10	56
Tuberculin Tested. . .	11	2	13	10	3	5	7	51
Positive[1]	-	-	3	4	-	2	1	10
Percent Positive . . .	-	-	23.1	40.0	-	40.0	14.3	19.6
Not Examined								
Total Contacts	3	7	23	23	17	11	96	180
Tuberculin Tested . .	3	6	21	21	12	10	76	149
Positive	-	-	2	3	7	1	25	38
Percent Positive . . .	-	-	9.5	18.3	58.3	10.0	32.9	25.8

[1] Includes persons with a reaction of 10 mm.or greater.
[2] Includes positive culture, negative or no smear.

SECTION VI - TUBERCULOSIS MORTALITY

(Tables 37 - 41)

Table 37. TUBERCULOSIS (ACTIVE) DEATHS NOTIFIED ON DEATH
British Columbia, 1982

	Tuberculosis Principal Cause of Death	Tuberculosis Contributing Cause of Death	Tuberculosis Not Related to Death	TOTAL
Notified on death . . .	5	3	2	10
Notified on death but diagnosed during life.	8	15	4	27
TOTAL	13	18	6	37

Table 38. TUBERCULOSIS (ACTIVE) DEATHS BY DIAGNOSIS
British Columbia, 1982

	Tuberculosis Principal Cause of Death	Tuberculosis Contributing Cause of Death	Tuberculosis Not Related to Death	TOTAL
Miliary	2	3	1	6
Far Advanced	7	2	2	11
Moderately Advanced . .	2	7	-	9
Minimal	1	4	2	7
Primary	-	-	1	1
TB Enteritis/Peritonitis	1	-	-	1
Genito-Urinary	-	1	-	1
TB Bone	-	1	-	1
TOTAL	13	18	6	37

Table 39. TUBERCULOSIS (ACTIVE) DEATHS BY COUNTRY OF BIRTH
British Columbia, 1982

	Tuberculosis Principal Cause of Death	Tuberculosis Contributing Cause of Death	Tuberculosis Not Related to Death	TOTAL
Canadian Born				
Native Indians . . .	1	4	2	7
Others	6	8	2	16
Foreign Born.	6	6	2	14
TOTAL	13	18	6	37

Table 40. TUBERCULOSIS (ACTIVE) DEATHS BY AGE AND SEX
British Columbia, 1982

		Tuberculosis Principal Cause of Death	Tuberculosis Contributing Cause of Death	Tuberculosis Not Related to Death	TOTAL
10 - 25 Years	M. . .	-	-	-	-
	F. . .	-	-	1	1
25 - 44 Years	M. . .	1	1	2	4
	F. . .	-	1	-	1
45 - 64 Years	M. . .	2	4	2	8
	F. . .	-	2	1	3
65 - 84 Years	M. . .	6	4	-	8
	F. . .	6	3	-	9
85 & Over	M. . .	-	2	-	2
	F. . .	-	1	-	1
TOTAL		13	18	6	37

Table 41. TUBERCULOSIS (ACTIVE) DEATHS BY DIAGNOSIS AND BACILLARY STATUS
British Columbia, 1982

DIAGNOSES	NOTIFIED ON DEATH		NOTIFIED ON DEATH BUT DIAGNOSED DURING LIFE	
	Bacillary Only	All Active Cases	Bacillary Only	All Active Cases
Miliary	1	2	4	4
Far Advanced.	2	4	6	7
Moderately Advanced . .	1	1	8	8
Minimal	1	2	5	5
Primary	-	-	-	1
TB Enteritis/Peritonitis	1	1	-	-
Genito-Urinary	-	-	1	1
TB Bone	-	-	1	1
TOTAL	6	10	25	37

SECTION VII - NEW ACTIVE TUBERCULOSIS AMONG REGISTERED INDIANS

(Tables 42 - 44)

Table 42. INCIDENCE OF NEW ACTIVE TUBERCULOSIS AMONG REGISTERED INDIANS, AGE-GROUP AND SEX, British Columbia, 1982

AGE-GROUP	MALE		FEMALE		TOTAL	
	Bacillary Cases	All Active Cases	Bacillary Cases	All Active Cases	Bacillary Cases	All Active Cases
0 - 14	-	2	1	2	1	4
15 - 24	-	-	1	2	1	2
25 - 34	4	4	6	6	10	10
35 - 44	2	3	5	6	7	9
45 - 54	7	8	2	2	9	10
55 - 64	1	1	-	-	1	1
65 - 74	-	-	-	-	-	-
75 & Over	1	1	2	2	3	3
TOTAL	19	23	17	20	36	43
RATES	64.5	78.0	57.7	67.8	61.1	73.0

Table 43. PRINCIPAL DIAGNOSIS OF NEW ACTIVE TUBERCULOSIS AMONG REGISTERED INDIANS AND BACILLARY CASES, British Columbia, 1982

DIAGNOSIS	BACILLARY ONLY		ALL ACTIVE CASES		BACILLARY AS PERCENT OF ALL ACTIVE CASES
	Number	Percent	Number	Percent	
PULMONARY					
Primary	-	-	3	7.0	-
Minimal	15	41.7	17	39.5	88.2
Moderately Advanced	9	25.0	9	21.0	100.0
Far Advanced	4	11.1	4	9.3	100.0
Miliary	3	8.3	3	7.0	100.0
Pleurisy	-	-	1	2.3	-
NON-PULMONARY					
Meninges & Central Nervous System	1	2.8	1	2.3	100.0
Skin	1	2.8	1	2.3	100.0
Lymphatic System	3	8.3	4	9.3	75.0
TOTAL	36	100.0	43	100.0	83.7

Table 44. NEW ACTIVE TUBERCULOSIS BY HEALTH DISTRICT OF RESIDENCE FOR REGISTERED INDIANS, British Columbia, 1982

HEALTH DISTRICT	NUMBER
North Okanagan	2
South Okanagan	-
South Central	2
Upper Fraser Valley	-
Central Vancouver Island	3
Upper Island	3
Cariboo	7
Skeena	6
Peace River	1
Northern Interior	3
Metropolitan Board of Health of Greater Vancouver	12
Capital Regional District Community Health Services	2
Coast-Garibaldi	1
Ocean Falls Nursing District	1
TOTAL	43